

## **Remarks**

### **Amendments to the Claims**

Claims 13-14 and 54-57 were pending. Claim 14 is allowed. Applicants have amended claim 13 and 54-57 and have added new claims 58-92. Upon entry of the present amendment, claims 13-14 and 54-92 will be pending and presented for examination.

Applicants have amended claim 13 and 55 to recite “comprising amino acids 1-1753 of.” Support for the amendment is found in the original application at least at page 6 and in Examples 2-18. Applicants have amended claims 54 and 57 to delete unnecessary words. Applicants have amended claim 56 to recite a “purified polypeptide consisting of an amino acid sequence.” Support for the amendment is found in the original application at least in original claims 9 and 14 and at page 2.

Support for new claims 58-91 is found in the original application at least at page 20 and in Examples 2-18. Support for new claim 92 is found in the original application at least at pages 51-53.

Applicants submit that the present amendment adds no new matter to the application.

### **Claim rejections under 35 U.S.C. § 112, first paragraph**

The Office action rejected claims 13 and 54-57 under 35 U.S.C. § 112, first paragraph. Although the Office action acknowledged that the specification is enabling for a polypeptide consisting of an amino acid sequence of SEQ ID NO:2-19, the Office action alleged that the specification does not enable “a polypeptide ‘comprising’ an amino acid sequence comprising an amino acid of SEQ ID NOs:2-19, a pharmaceutical composition [comprising an] amino acid sequence consisting of SEQ ID NOs:3-19, [or] a pharmaceutical composition [comprising an] amino acid sequence [comprising] SEQ ID NOs:2-19.” Applicants traverse this rejection to the extent it is maintained against amended claims 13 and 54-57.

Applicants have amended claim 56 to refer to a polypeptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NOS:3-19. As the Office action acknowledged that the specification is enabling for a polypeptide consisting of an amino acid sequence of SEQ ID NO:2-19, Applicants request reconsideration and withdrawal of the rejection to the extent it is maintained against amended claim 56.

Applicants have amended claim 13 to recite a polypeptide comprising amino acids 1-1753 of SEQ ID NO:2 and have amended claim 55 to recite a polypeptide comprising amino acids 1-1753 of an amino acid sequence selected from the group consisting of SEQ ID NOS:3-19. Thus, amended claims 13 and 55 do not refer to “a fragment . . . as small as 2 residues” (Office action, page 3), nor to “a derivative, fragment, analog or homolog” (Office action, page 3). Although the open ended term “comprising” has been retained, Applicants submit that it is well within the level of skill in the art to add an element (such as, for example, a peptide tag, a heterologous protein or domain thereof, a binding moiety, a label, *etc.*) to a polypeptide without interfering with the function of the polypeptide, and that this can be done without undue experimentation. Accordingly, Applicants request reconsideration and withdrawal of the rejection to the extent it is maintained against amended claim 13.

Applicants have amended claims 54 and 57 to remove recitations of “pharmaceutical” and “pharmaceutically acceptable.” Accordingly, it is no longer “at issue whether the claimed invention would function as a pharmaceutical composition” (Office action, page 3). Applicants therefore request reconsideration and withdrawal of the rejection to the extent it is maintained against amended claims 54 and 57.

Rejection under 35 U.S.C. § 101

The Office action rejected claims 56 under 35 U.S.C. § 101 as allegedly failing to “point out any non-naturally occurring differences between the claimed products and . . . naturally occurring products.” Applicants have amended claim 56 to recite a purified polypeptide. Accordingly, Applicants request reconsideration and withdrawal of the rejection to the extent it is maintained against amended claim 56.

Rejection under 35 U.S.C. § 102

The Office action rejected claims 13 and 54-57 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 6,313,264. Specifically, the Office action interpreted claims 13 and 54-57 to read on polypeptides comprising fragments “of SEQ ID NO:2-19 as small as 2 residues” (Office action, page 5). Applicants have amended claim 13 to recite a polypeptide comprising amino acids 1-1753 of SEQ ID NO:2 and have amended claim 55 to recite a polypeptide comprising amino acids 1-1753 of an amino acid sequence selected from the group consisting of SEQ ID NOS:3-19. As amended, claims 13 and 55 do not read on polypeptides comprising fragments of SEQ ID NO:2-19 as small as 2 residues. Accordingly, U.S. Patent No. 6,313,264 does not anticipate claim 13 or 55 or any claim depending from 13 or 55 (e.g. claims 54 and 57).

Applicants have amended claim 56 to recite a polypeptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NOS:3-19. U.S. Patent No. 6,313,264 does not disclose a polypeptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NOS:3-19 and therefore cannot anticipate amended claim 56.

Applicants respectfully request reconsideration and withdrawal of the rejection to the extent it is maintained against any of amended claims 13 and 54-57.

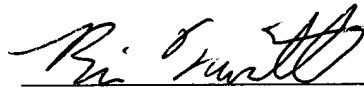
**CONCLUSION**

Claims 13-14 and 54-92 are pending and believed to be in condition for allowance. Examiner Kim is requested to telephone the undersigned attorney to discuss any remaining issues.

Respectfully submitted,

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